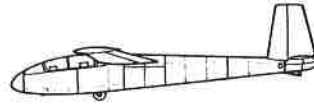




Aircraft Industries, a.s.



## MANDATORY BULLETIN

**MB No. : L13 / 109 a**

**Concerning:** All L13 , L13A BLANÍK gliders

**Subject** Check of the connection area of the bottom wing suspension with spar cap.  
Review of the glider operation history

**Reason:** .Bottom wing spar cap failure occurrence during glider operation

**To be carried out not later than:** Immediately

**To be carried out by:** ICAO Annex 1 AML Holder with L13/L13A Type Qualification

**Costs covered by:** Operator

**Necessary material to be supplied by:** No material required.

**Bulletin becomes effective :** On the day of approval

**Sheets :** 5

  
.....  
Pešák Miroslav  
Chief Designer

Technical content of this document has been approved based on the Design Organisation Approval No. EASA.21J.119  
18. 6. 2010

## **A. WORK PROCEDURE**

### **I. L 13 glider operation history data check on compliance with Average Operation Conditions stated in the glider operation documentation**

The Average Operation Conditions for determination of the service life are as follows:

- Number of takeoffs is 4.8 launches per 1 flight hour
- The ratio of winch launches to the number of aerotow launches is 5:1
- Crew: 65% solo : 35% dual
- Aerobatic flight time is 2% maximum of total flight time

#### **NOTE**

The aerobatic flight is a flight (solo or dual crew) during which any aerobatic maneuvers are performed within the flight stage from the release of the towing cable up to the minimum safe height. The aerobatic flight time is the total flight time i.e. the take-off to landing time.

Glider operation history data shall be taken from glider log book. Sumarized data shall be filled in into the form – see Appendix No. 1.

Compare the operation history data with Average Operation Condition stated in the glider operation documentation.

In case that the glider operation history data are different from above Average Operation Conditions (more than 5 launches per 1 flight hour or more than 50 % dual flights) or percentage of aerobatic flights exceeds 2% of total flight time then stop immediately operation of the glider and send information about the sailplane operation history filled into the attached form (see Appendix No 1) to the Type certificate holder. TC holder, after data evaluation, declares either possibility of continuous operation, eventually recommends aerobatic flights limitation or prohibition, or declares exhaustion of a glider service life.

### **II. Inspection of wing critical areas**

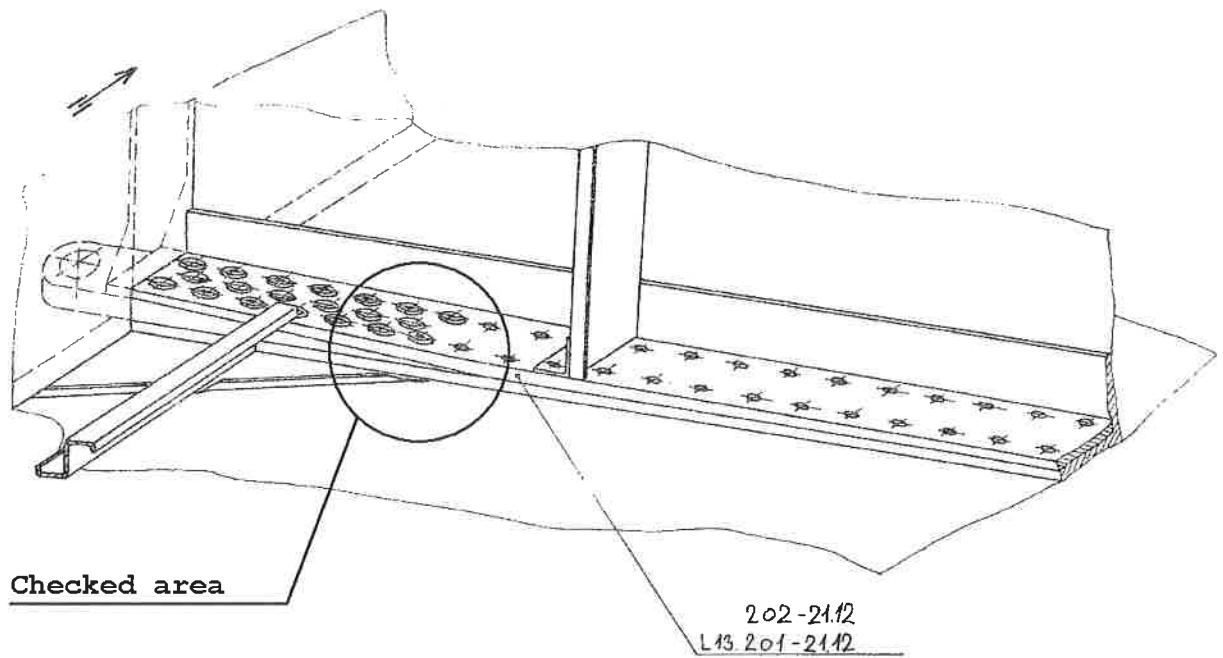
Perform visual check of sailplane areas critical in term of fatigue life:

Visual check of spar cap and cap splice from wing inner space shall be carried out on dismounted wings placed on fixture. Wing could be supported only in ribs areas. Fixture has to ensure uniform load distribution on wing surface.

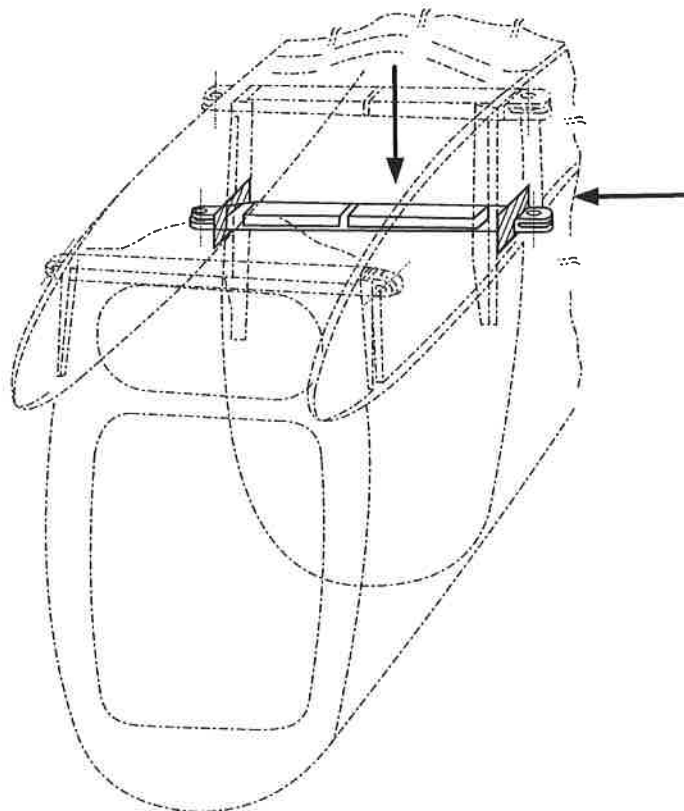
Check the wing spar lower cap and cap splice critical areas (through holes in the root rib and also from the wing outside) up to the distance circa 500 mm from the wing hinge axis. Pay special attention to the wing lower cap part visible from side view and cap splice in area of last rows of rivets of the spar cap and cap splice joint with the wing hinge from the hinge end - see figure 1. Focus especially on cracks occurrence, rivets loosening and corrosion.

Check the fuselage spar (see figure 2) from inside fuselage structure through holes in the centre section web. Focus especially on cracks occurrence, rivets and bolts loosening and corrosion.

In case of any defect finding stop immediately operation. Send information about location and state of defects finding to the Type Certificate holder.



**Figure 1 Check of wing spar lower cap and cap splice critical areas**



**Figure 2 Check of fuselage spar from inside fuselage structure**

**B. MATERIAL REQUIRED FOR MODIFICATION OF ONE GLIDER**

Not necessary.

**C. ILLUSTRATED PARTS**

None.

**D. DOCUMENTATION REQUIRED**

Operation documentation manual for given glider.

**E. TOOLS REQUIRED**

Magnifier 6x magnifying.

**F. SPARE PARTS IN OPERATION**

Not affected.

**G. GLIDER MASS**

Not affected.

**H. RECORD IN GLIDER LOGBOOK AFTER BULLETIN EXECUTION**

Mandatory Bulletin L13/109a was carried out.

a) No defects were found. Glider is released to operation.

Hours of aerobatic flights flown from the beginning of the operation: XX FH, from this XX FH solo flights and XX FH dual flights.

b) No defects were found. Glider operation history data exceed Average Operation Condition. Glider is grounded.

Hours of aerobatic flights flown from the beginning of the operation: XX FH, from this XX FH solo flights and XX FH dual flights.

c) Defects were found out. Glider is grounded.

Hours of aerobatic flights flown from the beginning of the operation :XX FH, from this XX FH solo flights and XX FH dual flights.

Date: .....

Carried out by: .....

(signature of the AML holder)

Name, grade and seal of AML ICAO (Annex No. 1) for L13/L13A Type

## Summary of L-13 glider Log book record

### 1) Glider Operation History Data:

- Current owner: .....
- Current operator: .....
- Serial number: .....
- Registration number: .....
- Year of manufacture: .....
- Total flight hours: ..... *(from the beginning of operations)*
- Number of hours solo: ..... *(from the beginning of operations)*
- Number of hours dual: ..... *(from the beginning of operations)*
- Total number of take-offs: ..... *(from the beginning of operations)*
- Total number of aerotow take-offs: ..... *(from the beginning of operations)*
- Total number of ground launch take-offs: ..... *(from the beginning of operations)*
- Aerobatic flights flown solo *(in hours from the beginning of the operation):* .....
- Aerobatic flights flown dual *(in hours from the beginning of the operation):* .....
- Number of flight hours since the last general overhaul or major inspection .....
- Number of take-offs since the last general overhaul or major inspection .....
- The most recent general overhaul or major inspection date and location where .....

### 2) Supplemental Data

Does the glider have any damage history?

NO

YES – Brief description of damage, and of repair

Were any of the following substituted on the glider: wing – fuselage – tail surfaces?

NO

YES – state the serial numbers of the substituted parts, and their utilization data before and after installation

State serial numbers for fuselage: ..... Left wing: ..... Right wing: .....

Date:

*(Signature)*

*(Signature)*

.....  
Prepared by:  
*(Name)*

.....  
Operator's authorized representative  
*(Name, stamp)*